

Amendments to the Claims

This Listing of Claims will replace all prior versions and Listings of Claims in the application:

Listing of Claims

1. (Currently Amended) An image sensing apparatus comprising:

an image sensing element includes a first light receiving area and a second light receiving area which are formed on an image pickup surface of a semiconductor substrate by a plurality of divisional joint exposure operations, wherein the image pickup surface has on-chip color filter layer and on-chip micro lens layer on a semiconductor layer, wherein there is a shift between the on-chip color filter layer and the on-chip micro lens layer of the first receiving area and the on-chip color filter layer and the on-chip micro lens layer of the second light receiving area, and wherein pixel signals obtained by the first light receiving area and the second light receiving area are read out from the image sensing element via a same channel;

a correction device which corrects difference between output levels of pixel signals output from the first light receiving area and the second light receiving area via the same channel, wherein the difference between levels of the signals is a level difference caused by the shift between the on-chip color filter layer and the on-chip micro lens layer of the first receiving area and the on-chip color filter layer and the on-chip micro lens layer of the second light receiving area ~~said correction device simultaneously corrects, by a gain correction, a difference between levels of output signals from the first light receiving area and the second light receiving area, and a difference between levels of output signals of output channels included in the same channel; and~~

a control device which controls to write a signal corrected by said correction device to a frame memory.

2. (Previously Presented) The apparatus according to claim 1, wherein said correction device divides the light receiving areas into a plurality of blocks, and performs correction using a different correction value for each block.

3. (Previously Presented) The apparatus according to claim 1, wherein the light receiving areas include at least three partial image sensing regions in one direction, and said correction device corrects at least two of the three partial image sensing regions with correction values by using as a reference a central partial image sensing region selected from the three partial image sensing regions.

4. (Previously Presented) The apparatus according to claim 1, wherein said correction device performs correction using different correction values in a boundary direction between the light receiving areas.

5. (Original) The apparatus according to claim 1, wherein said correction device performs correction using a different correction value for each color.

6-10. (Cancelled).

11. (New) The apparatus according to claim 1, wherein said correction device simultaneously corrects, by a gain correction, a difference between levels of output signals from the first light receiving area and the second light receiving area, and a difference between levels of output signals of output channels included in the same channel.